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Dated: February 3, 2003

Signature: Paul B. Stephens

Paul B. Stephens

#13
2/12/03
T.M.
Docket No.: 29020/003A
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Miller et al.

Application No.: 09/548876

Group Art Unit: 3635

Filed: April 13, 2000

Examiner: Y. Horton

For: HEAT SHIELDED DOCK PAD

BRIEF ON APPEAL

Commissioner for Patents
Washington, D.C. 20231

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Sir:

Pursuant to the Notice of Appeal mailed July 3, 2002 in connection with the above-identified patent application, Applicants respectfully submit the instant Brief on Appeal in accordance with 37 C.F.R. § 1.192.

I. REAL PARTY IN INTEREST

The above-referenced patent application has been assigned to Rite-Hite Holding Corporation, who is the real party in interest to this appeal. The assignment has been recorded in the United States Patent and Trademark Office ("PTO") at Frame 010791 of Reel 0849.

II. STATUS OF THE CLAIMS

Currently, claims 1-20 are pending in this application. The pending claims (with proposed amendment) are presented in Appendix A to this Brief. Claims 1-20 stand rejected. Therefore, claims 1-20 form the subject matter of this appeal.

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By way of background, this application was filed on April 13, 2000. A status letter was filed on April 19, 2001, and the first official action eventually ensued on July 5, 2001.

The case was filed with claims 1-20, claims 1, 17 and 20 being the only independent claims. All claims were rejected in the first official action based upon a patent to Styba (U.S. Patent No. 6,016,637 attached as Appendix B). Claims 1, 2 and 12-15 were rejected as anticipated under 35 U.S.C. §102(e). Claims 3-11 and 16-20 were rejected under 35 U.S.C. §103(a) based on Styba. In response to these rejections, the applicants filed a response noting that each of the rejected claims recited "a heat shield" and that Styba did not teach a heat shield. As the applicants pointed out, the Styba structure relied upon by Examiner Horton was in fact a puncture resistant material not a heat shield. (1)

A second (and final) official action ensued (Appendix C), again rejecting all pending claims 1-20. Examiner Horton reiterated the same claim rejections made in the first official action and added a second obviousness rejection of claim 16, this time using Styba in view of a commercial product mentioned in the present specification (the Commercial Material RTCM01). Examiner Horton pointed to a passing comment in Styba that its puncture resistant material could be "polyester." From this comment, Examiner Horton surmised that Styba taught the claimed heat shield, because (per Examiner Horton) polyester was known for its "flexible and flame resistance characteristics." The Examiner erroneously determined (2) that a puncture-resistant-polyester layer would inherently function as a heat shield.

Of course, flame resistance and non-flammability are not necessarily indicators of heat shielding ability. Many fabrics and wearable items are made of

flame resistant materials, but do not shield heat and do not have high reflectivity or high thermal conductivity. In fact, one of the advantages of a heat shield is that the flame resistance of the surrounding materials is not an issue. Source heat is dissipated across the heat shield to prevent temperature build-up at any given spot from reaching a flame threshold point and, more importantly, from reaching the lower-temperature melting point threshold. Although the Examiner relies on it, in actuality, Styba's puncture-resistant-polyester layer would likely benefit from the claimed heat shield, which would shield the polyester from melting. In any event, the Examiner's rejection pointed to no correlation between the purported flame resistance characteristic of Styba's material and the actual claim language, that of a heat shield.

Furthermore, the Examiner's inherency argument is hollow given the enormity of the class of polyester materials. There is nothing to suggest that the entire class of polyesters (Styba made no mention of a particular polyester) is flame resistant, although such unanimity would be required to sustain the Examiner's inherency position vis-à-vis Styba.

In response to the final rejection, and pursuant to 37 C.F.R. §1.116, the applicants filed an amendment and response. The amendment cancelled claims 3 and 18, without prejudice, and amended claims 1, 7-11, 17 and 20 (a copy of the entire pending claim set showing the proposed amendments is attached as Appendix A).

III. STATUS OF THE AMENDMENTS

As noted above, cancellation without prejudice of claims 3 and 18, and amendments of claims 1, 7-11, 17 and 20 were requested in an amendment after final,

pursuant to 37 C.F.R. §1.116. In a communication dated July 29, 2002 (Appendix D), Examiner Horton refused to enter the enclosed amendments.¹

By way of brief summary, independent claim 1 was amended to clarify the difference between heat shielding and the purportedly inherent characteristics relied-upon in the official actions. In particular, claim 1 was amended to add the phrase “wherein the heat shield has a higher thermal conductivity than the foam core.” This was the only amendment made to claim 1. Additional claim amendments were as follows.

Claim 7 was amended from dependent to independent form retaining its claim scope. Claim 10 was also amended from dependent to independent form retaining its claim scope. Independent claims 17 and 20 were amended to add further clarifying language similar to that added to claim 1. Specifically, claim 17 was amended to recite wherein “the heat shield has a higher thermal conductivity than the foam core and the cover.” And claim 20 was amended to recite the heat shield “has a higher thermal conductivity than the foam core.”

The amendments above are the first and only amendments in the case and are believed to place the case in better form for appeal.

IV. SUMMARY OF THE INVENTION

Although reference numerals and specification citations are inserted below in accordance with C.F.R. 1.192(c), these reference numerals and citations are merely examples of where support may be found in the specification for the terms used in this section of the Brief. There is no intention to in anyway suggest that the

¹ Paragraph No. 7 of the Advisory Action states that the amendment was entered, but this appears to be in error based on paragraph No. 2.

terms of the claims are limited to the examples in the specification. Although as demonstrated by the reference numerals and citations below, the claims are fully supported by the specification as required by law, it is improper under the law to read limitations from the specification into the claims. Pointing out specification support for the claim terminology as is done here to comply with Rule 1.192(c) does not in any way limit the scope of the claims to those examples from which they find support. Nor does this exercise provide a mechanism for circumventing the law precluding reading limitations into the claims from the specification. In short, the reference numerals and specification citations are not to be construed as claim limitations or in any way used to limit the scope of the claims.

A. Independent Claim 1 and Its Dependent Claims

In the invention as defined in claim 1, a dock pad (14) adapted to seal against a vehicle (10) parked against the dock pad (14) is provided. The dock pad (14) is recited to include a foam core (20 and 20') and a cover (22) disposed on the foam core (20 and 20').

The dock pad (14) of claim 1 further includes a heat shield (38 and 38') adjacent the cover (22), wherein the dock pad (14) is adapted to seal against the vehicle (10) by virtue of the foam core (20 and 20') being compressible, the cover (22) being pliable, and the heat shield (38 and 38') being pliable. By way of amendment after final, claim 1 also recites "wherein the heat shield has a higher thermal conductivity than the foam core."

In the invention as defined in claim 2, the dock pad recited in claim 1 is further defined such that the heat shield is interposed between the cover and the foam core. (Specification, Page 5, ll. 10-13).

In the invention as defined in claim 4, the dock pad recited in claim 1 is further defined such that the heat shield has a higher thermal conductivity than the cover. (Specification, Page 5, ll. 28-30).

In the invention as defined in claim 5, the dock pad recited in claim 1 is further defined such that the heat shield can withstand a higher temperature than the foam core. (Specification, Page 5, ll. 24-27).

In the invention as defined in claim 6, the dock pad recited in claim 1 is further defined such that the heat shield can withstand a higher temperature than the cover. (Specification, Page 5, ll. 24-27).

In the invention as defined in claim 12, the dock pad recited in claim 1 further comprises a backer (24) attached to the cover and having a greater rigidity than the foam core and the cover to provide the foam core and the cover with structural support. (Specification, Page 4, ll. 23-26).

In the invention as defined in claim 13, the dock pad recited in claim 1 further comprises a sealing surface (36) and a mounting surface (26) that face away from each other with at least a portion of the heat shield extending substantially parallel to the sealing surface and being closer to the sealing surface than the mounting surface. As further recited in claim 13, the sealing surface is adapted to seal against the vehicle and the mounting surface is adapted to be attached to a wall. (Specification, Page 4, l. 23 - Page 5, l. 4).

In the invention as defined in claim 14, the dock pad recited in claim 1 is further defined such that the dock pad has an elongated length running substantially horizontally. (See, e.g., Figure 1).

In the invention as defined in claim 15, the dock pad recited in claim 1 is further defined such that the dock pad has an inverted U-shape with one horizontally elongated member and two vertically elongated members, with the heat shield being part of the horizontally elongated member. (*See, e.g.*, Figure 1).

In the invention as defined in claim 16, the dock pad recited in claim 1 is further defined such that the heat shield includes aluminum. (Specification, Page 5, ll. 24-27 and Page 6, ll. 7-14).

B. Independent Claim 7 and Its Dependent Claims

In the invention as defined in claim 7, a dock pad (14) adapted to seal against a vehicle parked (10) against the dock pad (14) is provided. The dock pad (14) is recited to include a foam core (20 or 20') and a cover (22) disposed on the foam core (20 or 20'). (Specification, Page 4, ll. 13-22). The dock pad (14) further includes a heat shield (38 or 38') adjacent the cover (22), wherein the dock pad (14) is adapted to seal against the vehicle (10) by virtue of the foam core (20 or 20') being compressible, the cover (22) being pliable, and the heat shield (38 or 38') being pliable. Further, the heat shield (38 or 38') has a higher reflectivity than the foam core (20 or 20'). (Specification, Page 5, ll. 14-27).

In the invention as defined in claim 8, the dock pad of claim 7 is defined such that the heat shield has a higher reflectivity than the cover. *Id.*

C. Independent Claim 10 and Its Dependent Claims

In the invention as defined in claim 10, a dock pad (14) adapted to seal against a vehicle (10) parked against the dock pad (14) is provided. The dock pad (14) is recited to include a foam core (20 or 20') and a cover (22) disposed on the foam core (20 or 20'). (Specification, Page 4, ll. 13-22). The dock pad (14) further

includes a heat shield (38 or 38') adjacent the cover (22), wherein the dock pad (14) is adapted to seal against the vehicle (10) by virtue of the foam core (20 or 20') being compressible, the cover (22) being pliable, and the heat shield (38 or 38') being pliable. Further, the cover (22) has a lower auto ignition point than the heat shield (38 or 38'). (Specification, Page 5, ll. 24-27).

In the invention as defined in claim 9, the dock pad of claim 10 is defined such that the cover has a higher auto ignition point than the foam core. (Specification, Page 5, ll. 20-24).

In the invention as defined in claim 11, the dock pad of claim 10 is defined such that the foam core has a lower auto ignition point than the heat shield. (Specification, Page 5, ll. 24-27).

D. Independent Claim 17 and Its Dependent Claims

In the invention as defined in claim 17, a dock pad (14) is recited to include a foam core (20 or 20'); a cover (22) disposed on the foam core (20 or 20') (Specification, Page 4, ll. 13-22); and a heat shield (38 or 38') interposed between the cover (22) and the foam core (20 or 20'), wherein the heat shield (38 or 38') has a higher thermal conductivity than the foam core (20 or 20') and the cover (22). (Specification, Page 5, l. 28 - Page 6, l. 6.)

In the invention as defined in claim 18, the dock pad of claim 17 is defined such that the heat shield has sufficient flexibility to allow the dock pad to compress and decompress. (Specification, Page 5, ll. 4-9).

E. Independent Claim 20

In the invention as defined in claim 20, a dock pad (14) is recited to include a backer (24); a foam core (20 or 20'); a cover (22); and a heat shield (38 or

38'). The dock pad (14) is further defined to provide that the foam core (20 or 20') is between the backer (24) and a sealing surface (36) of the cover (22) (*See, e.g.*, Figure 1), the heat shield (38 or 38') is between the foam core (20 or 20') and sealing surface (36) (Specification, Page 5, ll. 9-13), the backer (24) is more rigid than the foam core (20 or 20') and cover (22) (Specification Page 4, ll. 23-25), and the heat shield (38 or 38') has a higher thermal conductivity than the foam core (20 or 20'). (Specification, Page 5, l. 28 - Page 6, l. 6).

V. ISSUES ON APPEAL

The issues presented on appeal are as follows:

- (1) Are each of claims 1, 2, 4-15, 17, 19, and 20 patentable over Styba, U.S. Patent 6,016,637?
- (2) Is claim 16 patentable over Styba alone or Styba in view of the Commercial Material RTCMO1?

VI. Grouping of Claims

Applicants assert that each of groups:

- a. claim 1, 2, 4-6, 12-15, 17 and 20;
- b. claims 7 and 8;
- c. claims 9-11;
- d. claim 16;

stands or falls separately. That each of these claim groups stands or falls separately is demonstrated by the facts that: (1) each of these claim groups includes different and distinct limitations that cannot be found in the cited art as demonstrated below, and (2) that if any one of claims 1, 2, 4-17, 19, and 20 were met by the cited art, the patentability of the claims in the remaining groups would not be effected.

VI. ARGUMENT

A. Are Each of Claims 1,2, 4-15, 17, 19, and 20 Patentable Over Styba, U.S. Patent 6,016,637?

1. 1, 2, 4-6, 12-15, 17, 19 and 20 Are Patentable

Claim 1, and claims 2, 4-6 and 12-15 depending therefrom, all recite a dock pad adapted to seal against a vehicle parked against the dock pad. The claimed dock pad includes a foam core; a cover disposed on the foam core; and a heat shield adjacent the cover, wherein the dock pad is adapted to seal against the vehicle by virtue of the foam core being compressible, the cover being pliable, and the heat shield being pliable. In an amendment after final, the applicants proposed amending claim 1 to further recite “wherein the heat shield has a higher thermal conductivity than the foam core.”

Claim 17 is an independent claim reciting a dock pad including a foam core and a cover disposed on the foam core. As amended, the claimed dock pad further includes a heat shield interposed between the cover and the foam core, wherein the heat shield has a higher thermal conductivity than the foam core and the cover. Claim 19 depends from claim 17.

Claim 20 is an independent claim reciting a dock pad including a backer, a foam core, and a cover. The dock pad further includes a heat shield that has a higher conductivity than the foam core.

None of the prior art teach or suggest the claimed heat shields.

In each of these claims, the recitation of a heat shield connotes a structure for shielding from heat. The drawings depict exemplary heat shields 38 and 38', and the specification describes these and other exemplary heat shields in numerous places, for example:

To make pad 14 more resistant to heat, such as heat generated by a taillight 32 pressing against certain points 34 on a sealing surface 36 of pad 14, a heat shield 28 is attached to pad 14... Page 5, ll. 2-4.

Specific characteristics of heat shields in preferred examples are also described in the specification. In some examples, the heat shield is described as having a thermal conductivity higher than that of the core and/or cover.

To reduce peak temperatures of core 20 and/or cover 22 when heated by taillight 32, heat shield 38 is made of a material that has a higher thermal conductivity than core 20 and/or cover 22. The maximum temperature at areas of concentrated heat, such as points 34, is reduced by shield 38 being able to effectively disperse the heat over a broader area. The term, "thermal conductivity" refers to a materials ability to conduct heat of a given temperature gradient along a given length and through a given cross-sectional area of the material, thus thermal conductivity is a property of the material itself, and is generally independent of the material's shape. A typical unit of measure of thermal conductivity would be (Btu)/(hr)(ft)(°F). Specification, Page 5, l. 28 - Page 6, l. 6.

From the descriptions of these preferred embodiments and from the plain language of the claims, the term "heat shield" and the heat shield having "a higher thermal conductivity than the foam core" would be understood to persons of ordinary skill in the art. And it would be understood that Styba does not teach the claimed heat shield.

Styba does describe a dock seal and method of forming the same. In fact, it is the method of forming a dock seal to which Styba is primarily directed. In particular, Styba discloses a dock seal that can be made by "applying liquid material over [a] resilient member and curing the liquid material to form a flexible coating." The liquid is applied over a compressible, resilient member 30. Styba claims only the

various methods of applying its liquid cover material (e.g., “spraying, pouring, dipping or brushing”). Styba, Col. 1, ll. 57-63.

Styba uses a foam core as a compressible member. To protect this core, Styba supplies a “puncture-resistant material 34” on an outer surface of the core. The material is positioned between the core and the cover and is only described as serving this “puncture-resistance” function. Styba nowhere suggests that this material provides any heat shielding or that it may be replaced with one that does.

Only two types of materials are described for the puncture resistant material, “nylon or polyester.” There is no mention of any specific type of nylon or any specific type of polyester, only the desire that the material be puncture-resistant. Furthermore, the material is not even necessary to Styba’s dock seal, as it may be replaced if reinforcing materials (like “blown chopped fibers, such as fiberglass”) are sprayed along with the liquid material to form the cover. Styba, Col. 3, ll. 3-17. That is, if the cover is sufficiently puncture resistant, then there is no need for the material 34.

Despite Styba’s express descriptions being limited to puncture resistance, it is material 34, and specifically the recitation that the material may be “polyester,” that Examiner Horton relies upon as teaching the claimed heat shield. The reliance is both legally and factually wrong. No inherency argument may be sustained as a matter of law from Styba’s reference to the generic class of polyester materials. Even assuming *arguendo* an inherency argument could pass the red-face test, the physical properties cited by the Examiner have no bearing on the physical properties actually claimed.

Factual Error

It is well settled that anticipation requires the presence of a “single prior art disclosure of each and every element of a claimed invention.” Lewmar Marine, Inc. v. Barient, Inc., 827 F.2d 744, 747 (Fed. Cir. 1987). Such disclosure must be either express or under the principals of inherency. Kalman v. Kimberly-Clark Corp., 713 F.2d 760 (Fed. Cir. 1983). For a teaching to be inherent it must necessarily be present in the single prior art disclosure. *See, e.g.*, Electro Medical Systems, S.A. v. Cooper Life Sciences, Inc., 34 F.3d 1048 (Fed. Cir. 1994).

The Examiner acknowledges that Styba does not expressly teach a heat shield. Instead, Examiner Horton invokes inherency.

So, eventhough [sic] Styba does not explicitly state that the material (34) is a “heat shield”, heat resistance is an inherent characteristic of the disclosed material - polyester. Paper No. 7, page 3.

Examiner Horton cites selected definitions of particular types of polyesters in support of the rejection. However, while the definitions indicate that some polyester is flame resistant (indeed, it is the Applicant’s experience that melting is more problematic than ignition when dealing with polyester), there is no evidence of record that polyester is a heat shield. In some forms, polyester may be resistant to burning, but this says nothing about whether polyester is a good or bad conductor of heat or whether it is a good or bad reflector of heat. For example, there is nothing to suggest that a polyester layer can dissipate high heat across its body, like a high conductivity heat shield would. Since the law is clear that a rejection must be based on actual evidence (see, In re Werner Kotzab, 217 F.3d 1365), the absence of any evidence of record as to polyester’s heat shielding properties (as opposed to its burning properties)

demonstrates that each of the rejections on Styba is totally flawed and must be withdrawn.

The Examiner points to two specific properties of two specific types of polyesters as amounting to the heat shielding function performed by the claimed heat shield; some polyester fibers are “nonflammable,” and some polyester resins are “flame resistant.” Even tabling for the moment the question of whether the polyester described by Styba must necessarily fall within one of these two polyester categories, which the Examiner has not shown, the properties themselves have nothing to do with the claimed subject matter.

Flammability relates to combustion. A flame retardant material, for example, is defined as a “substance that can suppress, reduce, or delay propagation of a flame through a polymer material.” McGraw-Hill Dictionary of Scientific and Technical Terms, 5th Ed.

The ability of a material to resist propagation of a flame is not germane to the extant claims, though. Claim 1 recites a dock pad having a heat shield. A heat shield with a high thermal conductivity or high reflectivity, for example, would stop a dock pad from becoming hot enough to combust. In high thermal conductivity materials, for example, the material is chosen because it dissipates any localized heat over the entire heat shield - something not suggested to be a trait of Styba’s polyester. And, in high reflectivity materials, like those claimed in claim 7, the heat would be reflected from the shield (and thus, away from a more combustion-susceptible material, for example) - again, something not suggested to be a trait of Styba’s polyester. The present application describes a foam core that may be polyester and a cover that may be nylon. It is the separate heat shield, however, that protects these

materials from damage. Flame characteristics are not an issue with the extant teachings, because of the heat shield.

Simply put, the Examiner's reliance on flammability and flame resistance is a red-herring; the claim recites a heat shield. The Examiner's characteristics may be indicative of auto ignition point (i.e., the point at which an object will self-ignite without being exposed to a flame), but they do not necessarily relate to the resistance to heat flow through the material, nor do they necessarily relate to whether a material has a higher thermal conductivity than another material.

Another short example may offer further guidance. Polyester materials are used in clothes and outdoor products, such as backpacks and tents. They are flexible, light-weight, and (in some forms) puncture-resistant.³ In none of these common forms is polyester known to be heat shielding in the sense of the current claims. In fact, polyester in these forms is known to melt under high heat, suggesting that it would not function as a heat shield at all—the melting temperature threshold is typically much lower than the flame temperature threshold. In contrast, in the present application, aluminum is described as one exemplary material forming a heat shield. Aluminum has a high thermal conductivity, a high reflectivity, and is heat resistant. Aluminum, especially thin-layer aluminum, however, is not known to be puncture resistant. Clearly, the two types of materials are distinctly different.

³ The present application also describes that polyester may be used to form the foam core.

In sum, even if Styba's use of the term "polyester" necessarily invokes the specific nonflammable or flame resistant polyesters mentioned in the dictionary portions cited by the Examiner, this 'inherency' is of no import because it still does not teach a "heat shield" or a heat shield having "a higher thermal conductivity than the foam core," as recited in claims 1, 2, 4-6, 12-15, 17, 19 and 20. Therefore, the rejection of these claims represents factual error and must be overturned.

Legal Error

Not only is the rejection factually flawed, it is legally flawed. One problem with the inherency rejection is that Styba discusses a generic class of materials. There is nothing to suggest that all materials in the generic class have the properties proffered by the Examiner. In fact, the Examiner's cited dictionary materials (Appendix C) suggests that all polyesters do not share the same properties. Nor is there anything suggesting that one of ordinary skilled in the art would have known to replace the puncture-resistant polyester with a heat shield. Courts do not allow inherency challenges based on mere possibility or conjecture, because this is at odds with the requirements of anticipation. "The mere fact that a certain thing may result from a given set of circumstances is insufficient to prove anticipation." Electro Medical Systems, S.A. v. Cooper Life Sciences, Inc., 34 F.3d 1048, 1052 (Fed. Cir. 1994). In other words, it does not matter that a particular polyester may be flame resistant, which as described elsewhere is itself not probative, the prior art must necessarily include the claimed element.

In In re Brink (164 USPQ, 247, 249 (CCPA 1970)), the Court of Customs and Patent Appeals addressed a situation nearly identical to the present one. An examiner rejected a claim under 35 U.S.C. §102 based upon a prior art reference

which disclosed a generic type of material (“Owen-Corning TWF”). The patent claims required materials with certain physical properties. The prior art reference made no mention of whether the TWF material it used had these properties. The examiner in In re Brink included a dictionary handbook that listed some specific TWF materials, to evidence what the prior art reference inherently meant by its usage of TWF. The Board sustained the rejection, but the CCPA reversed.

The patentee argued that claimed subject matter was “not inherent in the [prior art] because nowhere therein [was] the importance of bed density recognized.” In re Brink, 164 USPQ at 249. “Moreover, [even] if [the handbook] may be properly referred to, it is merely speculative that anything therein described is the same material used in the reference patent,” argued the patentee. Id. The CCPA agreed, noting that, based upon the relied-upon disclosures, “one is unable to say with reasonable certainty that one form of TWF would be used in preference to another.” In reversing the rejection, the CCPA stated:

[W]e do not see how a disclosure or combination of disclosures leaving one to rely on fortune in choosing the referred to material can function as an anticipation.
Id.

Applying this holding to the present case, there is nothing in Styba or the dictionary reference attached by the Examiner that suggests that a particular type of polyester was contemplated by Styba or that the contemplated polyester did include, or could have included, the claimed physical property, namely, heat shielding. *A fortiori*, there is nothing to suggest that Styba inherently meant a heat shielding material having a “thermal conductivity higher than the foam core,” as recited in claims 1, 2, 4-6, 12-15, 17, 19 and 20.

No Prima Facie Obviousness

Examiner Horton rejected claims 4-6, 17, 19 and 20 as being obvious over Styba.⁴ The subject matter of claims 17 and 20 is provided in this section above. Claim 4 further defines the subject matter of claim 1 providing “wherein the heat shield has a higher thermal conductivity than the cover.” Claim 5 further defines the subject matter of claim 1 providing “wherein the heat shield can withstand a higher temperature than the foam core.” Claim 6 further defines the subject matter of claim 1 providing “wherein the heat shield can withstand a higher temperature than the cover.” Claim 19 further defines the subject matter of claim 17 providing “wherein the heat shield has a sufficient flexibility to allow the dock pad to compress and decompress.”

The rejection of each of these claims is improper. There is no teaching, suggestion or motivation within the prior art to reconstruct the Styba disclosure to form the claimed subject matter. The prior art does not teach using a heat shield with the structure of Styba, and thus, the Examiner has made no *prima facie* showing of obviousness.

The Examiner points to no teaching of the claimed subject matter within the prior art. Instead, with respect to claims 4-6, 17 and 19, the Examiner summarily states:

[I]t is within the skill of a worker in the art to select a known material on the basis of its suitability for the intended use as an obvious matter of design choice... There are several different types of foam cores

⁴ Claims 3 and 18 were similarly rejected, but have been cancelled in the amendment filed after final. Their respective subject matters have been incorporated into independent claims 1 and 17, respectively.

as there are heat shields. Each type of material bears its own distinct characteristics with respect to thermal conductivity and ignition points. The type of foam and heat shield would depend greatly upon the environment in which the dock pad is going to be used. If the dock pad was not used as frequently as others, a heat shield with not as high thermal conductivity may be used because the dock pad would not be getting as much use (i.e. the chance of the taillights of a truck destroying the pad are less) and vice-versa. Paper No. 7, Page 6.

The Examiner uses similar language in rejecting claim 20. In both cases, Examiner Horton falls into the trap of using the pending application as a blueprint on how to modify the prior art.

Even to establish obviousness based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. In re Kotzab, 217 F.3d 1365, 1369 (Fed. Cir. 2000); *See, also*, MPEP §2142. This requirement is necessary to avoid what the Federal Circuit has recognized as “the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.” *Id.* As explained, at length, by the Federal Circuit in In re Rouffet:

As this court has stated, “virtually all [inventions] are combinations of old elements.” Therefore, an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be “an illogical and inappropriate process by which to determine patentability.” To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the

references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

In re Rouffet, 47 U.S.P.Q.2d 1453, 1457 (citations omitted and emphasis added). As further explained in the In re Rouffet decision:

This court has identified three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. In re Rouffet, at 1458.

Examiner Horton does not point to any teaching in Styba as supporting the modifications necessary to sustain a *prima facie* case of obvious. In fact, Styba could not be used for such a purpose, because when using a reference to establish an implicit teaching, motivation, or suggestion, its teachings must be considered in the context of the teaching of the entire reference. In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000). The relevant teaching of Styba is directed to puncture-resistance, and only puncture-resistant materials would be selected for use in its structure.⁵

Examiner Horton says that it would be within the skill of the ordinary worker in the art to select known materials that are suitable for the intended use. There is nothing in the statutes or the case law which makes “that which is within the capabilities of one skilled in the art” synonymous with obviousness. Ex parte Gerlach and Woerner, 212 U.S.P.Q. 471 (PTO Bd. App. 1980). Thus, the Examiner’s position is flawed as a matter of law.

⁵ Even Styba’s puncture-resistant layer may be eliminated (Styba, Col. 3, ll. 8-17), further demonstrating that one would not have thought to replace it with something used for an entirely different intended purpose.

Additionally, Styba's structure is used for an entirely different intended use, puncture-resistance, than the recited heat shield. The idea of interchangeability reduces to a guessing game when one of ordinary skill in the art is asked to interchange an element designed for one intended purpose with an element designed to achieve a wholly separate, unrelated, and, on this record, unrecognized intended purpose.

Precisely to avoid these improper (hindsight) interchangeability arguments, the Federal Circuit has cautioned "to say that the missing step comes from the nature of problem to be solved begs the question [where one] has failed to show that this problem had been previously identified anywhere in the prior art." *See, In re Zurko*, 111 F.3d 887, 890 (Fed. Cir. 1997). Overruled on other grounds. Failing to point to some suggestion or motivation to make these changes, the Examiner's interchangeability rejection would reduce to nothing more than an inherency argument under obviousness. But "a retrospective view of inherency is not a substitute for some teaching or suggestion which supports the selection and use of the various elements in the particular claimed combination." *In re Newell*, 891 F.2d 899, 901 (Fed. Cir. 1989). Absent some suggestion or motivation to modify Styba in the way suggested by the Examiner, the rejection is based merely upon hindsight.

The Federal Circuit requires that "particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components [or modifications] for combination in the manner claimed." *See, In re Kotzab*, 217 F.3d at 1371. Examiner Horton's rejection contains generalities and possibilities, but nothing from the prior art, or knowledge generally, stating why one would make the suggested modification. A *prima facie* case requires

coming forward with a “specific understanding or principle within the knowledge of a skilled artisan.” *Id.* Even, where the claimed invention may be considered a “technologically simple concept,”⁶ there must be a finding of a specific teaching within the prior art to make the combination or modification. *Id.* Here, the Examiner has pointed to none.

In short, Examiner Horton has made no *prima facie* case of obviousness in rejecting claims 4-6, 17, 19 and 20. Nothing in the prior art of record teaches the claimed heat shield and nothing teaches or suggests using a heat shield with Styba. The obviousness rejection of these claims should be overturned.

For all of these reasons, the rejection of claims 1, 2, 4-6, 12-15, 17, 19 and 20 are legally unsupportable. Reversal of the rejection is respectfully requested.

⁶ Complexity is not a statutory requirement of patentability. On the contrary,

Though technology has burgeoned, the patent system is not limited to sophisticated technologies and powerful corporations. Nowhere in the statute or the Constitution is the patent system opened only to those who make complex inventions difficult for judges to understand and foreclosed to those who make less mysterious inventions a judge can understand after hearing, as here, the inventor's explanation of his invention and the engineering principles he employed. The constitutional purpose is to encourage disclosure of patentable contributions to "progress in the useful arts", *all* the useful arts, not just the esoteric. The statute requires utility, novelty, and nonobviousness, not complexity.

Panduit Corp. v. Dennison Manufacturing Co., 1 U.S.P.Q.2d 1593, 1600 (Fed. Cir. 1987). (emphasis added).

2. Claims 7 and 8 Are Patentable

Claim 7 has been amended into independent form, with claim 8 depending therefrom. Both claims recite a dock pad adapted to seal against a vehicle parked against the dock pad. The claims further recite a foam core, a cover disposed on the foam core, and a heat shield adjacent the cover. As recited in claim 7, the heat shield has a higher reflectivity than the foam core. Claim 8 further defines the subject matter of claim 7 providing “wherein the heat shield has a higher reflectivity than the cover.”

As described in some embodiments within the specification, the heat shield is described as having a high heat reflectivity in comparison to the surrounding core and cover, thereby protecting the inner core from damage due to excessive heat.

...Moreover, shield 38 preferably has a higher reflectivity than core 20 and cover 22. This can be beneficial in cases where the cover can withstand a higher temperature than the core, wherein “withstand a higher temperature” means a material can be raised to the higher temperature and then substantially recover its original properties after its temperature returns to normal. For example, if the foam of core 20 has an auto ignition point (i.e., temperature at which the material self-ignites without being triggered by a spark or a flame) of 700 degrees Fahrenheit and cover 22 has an auto ignition point of 900 degrees, then heat shield 38 with high reflectivity could reflect heat away from the foam and redirect it into cover 22, which may be able to handle the heat better. Specification, Page 5, ll. 2-24

Examiner Horton has rejected claims 7 and 8 as being obvious over Styba. The Examiner points to no teaching of the claimed subject matter within the prior art – in fact, there is no mention of reflectivity by the examiner. Instead, the Examiner summarily states:

[I]t is within the skill of a worker in the art to select a known material on the basis of its suitability for the intended use as an obvious matter of design choice...Paper No. 7, Page 6.

As provided in the previous section (Section VI (A) (1)), the rejection is nothing more than improper hindsight.

The previous section provides the factual and legal bases for traversing the rejection of claims 7 and 8, and these arguments are incorporated into this section. It was shown above that nothing in the prior art taught the claimed heat shield or a heat shield having a higher thermal conductivity than the foam core. Similarly, there is nothing in the prior art that teaches or suggests a heat shield having a higher reflectivity than the foam core or the cover. And there is nothing in the statutes or the case law which makes "that which is within the capabilities of one skilled in the art" synonymous with obviousness. Ex parte Gerlach and Woerner, 212 U.S.P.Q. 471 (PTO Bd. App. 1980).

The Examiner's position is flawed as a matter of law. Examiner Horton has made no *prima facie* case of obviousness in rejecting claims 7 and 8. The rejection of these claims should be overturned.

3. Claims 9-11 Are Patentable

Claim 10 has been amended into independent form, with claims 9 and 11 amended to depend therefrom. All claims recite a dock pad adapted to seal against a vehicle parked against the dock pad. The claims further recite a foam core, a cover disposed on the foam core, and a heat shield adjacent the cover. As recited in claim 10, the cover has a lower auto ignition point than the heat shield. Claim 9 further defines the subject matter of claim 10 providing "wherein the cover has a higher auto

ignition point than the foam core.” Claim 11 further defines the subject matter of claim 10 providing “wherein the foam core has a lower auto ignition point than the heat shield.”

Examiner Horton has rejected claims 9-11 as being obvious over Styba. As provided in Sections VI (A) (1) and (2) above, the rejections are improper for failure to state a *prima facie* case of obviousness. Nothing in the prior art, alone or in combination or modification, teaches the claimed dock pad including a heat shield. For this reason alone, the rejections of claims 9-11 should be reversed.

Additionally, the rejections are flawed for lack of any showing of the comparative auto ignition point properties claimed. The Examiner points to no teaching within the prior art of the a heat shield, foam core, or cover having the comparative auto ignition points claimed. The Examiner impermissibly relies upon the skill of the worker in the relevant art as supplying the absent teachings:

[I]t is within the skill of a worker in the art to select a known material on the basis of its suitability for the intended use as an obvious matter of design choice...Paper No. 7, Page 6.

The Examiner does cite to materials indicating that polyester resin is “flame resistant.” But this naked statement is insufficient in light of the comparative nature of the claims.

First, there is nothing to suggest that when Styba referred to polyester it referred to a “flame resistant” polyester as mentioned in the Examiner’s dictionary reference (Appendix C). Second, there is nothing in the art of record to suggest that the puncture-resistant material has a higher auto ignition point than the foam core (polyurethane foam) or the cover. Furthermore, there is nothing in the art of record to

suggest that the cover has a higher auto ignition point than the foam core. Not only are these teachings absent from the prior art, there is nothing in the art of record which would suggest reconstructing Styba to include such materials.

As provided in the previous sections, the rejection is nothing more than improper hindsight. There is nothing in the statutes or the case law which makes “that which is within the capabilities of one skilled in the art” synonymous with obviousness. Ex parte Gerlach and Woerner, 212 U.S.P.Q. 471 (PTO Bd. App. 1980). The Examiner’s position is flawed as a matter of law and the rejection of claims 9-11 should be overturned.

B. Is Claim 16 Patentable Over Styba Alone or Styba in View of the Commercial Material RTCM01?

Claim 16 depends from claim 1 and further recites “wherein the heat shield includes aluminum.” The specification provides an example:

In some embodiments, heat shield 38 is incorporated within a Commercial Material RTCM01, which consists of two flexible sheets or layers of perforated aluminum foil reinforced with a polyethylene scrim or fabric... Specification, Page 5, ll. 4-6.

The Examiner rejects claim 16 under two obviousness rejections. The first rejection is based on Styba alone, the second on Styba in view of the Commercial Material RTCM01 mentioned above. Both rejections are predicated upon the Examiner’s belief that it would have been obvious to provide an aluminum heat shield, because it was “within the general skill of a worker in the art to select a known material [with] suitability for the intended use.”

Section VI (A), at *supra*, provides the legal and factual bases for traversing both obviousness rejections. That entire section is incorporated herein.

The Examiner's position, especially in this case where there is nothing supporting the conclusion from the prior art, reduces to nothing more than a rejection based upon hindsight. Indeed, this rejection goes so far as to explicitly use the applicants' disclosure as the roadmap to the reconstruction citing, as it does, the applicants' disclosed example implementation as the support for the rejection. Moreover, the Examiner points to nothing in the prior art acknowledging the problem solved by the claimed subject matter. The Examiner points to nothing that would suggest why one of ordinary skill in the art would select any heat shielding material as the puncture-resistant layer of Styba. The Examiner has pointed to no suggestion, for example, to use aluminum or any other similar material for that purpose. In fact, the only mention of aluminum is within the present application. Thus, it is abundantly clear that the Examiner's rejections are insufficient to establish *prima facie* obviousness.

The case law is replete with admonishments of similar attempts to rely upon the skill of the ordinary artisan alone as a grounds for invalidity. *See*, Section VI. B., at *supra*, citing In re Kotzab 217 F.3d 1365 (Fed. Cir. 2000); In re Rouffet 47 U.S.P.Q.2d 1453; In re Zurko 111 F.3d 887 (Fed. Cir. 1997); *See, also*, W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553 (Fed. Cir. 1983) ("To imbue one of ordinary skill in the art with knowledge of the invention..., when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of hindsight syndrome wherein that which only the inventor taught is used against its teacher."). The MPEP §2143.01 instructs that rejections such as that made by Examiner Horton are deficient.

A statement that modifications of the prior art to meet the claimed invention would have been well within the ordinary skill of the art at the time the claimed invention was made because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. MPEP §2143.01. (Citations Omitted).

The Board of Patent Appeals and Interferences reversed a rejection similar to the present one in Ex part Levengood. There the examiner made an obviousness rejection that amounted “to an assertion that one of ordinary skill in the relevant art would have been able to arrive at appellant’s invention because he had the necessary skills to carry out the requisite process steps.” 28 U.S.P.Q.2d 1300, 1301 (Bd. Pat. App. & Inter. 1993). The examiner pointed to no teaching or suggestion in the prior art, just the general ability of one of ordinary skill in the art. The Board held that this was an inappropriate standard for obviousness, stating “[t]hat which is within the capabilities of one skilled in the art is not synonymous with obviousness.” *Id.*

As the overwhelming weight of the cited authority provides, the Examiner’s rejections of claim 16 do not establish a *prima facie* case of obviousness and should be overturned.

VII. CONCLUSION

In view of the foregoing remarks, it is respectfully submitted that all of the rejections made in the final Office action should be overturned.

Respectfully submitted,

MARSHALL, GERSTEIN, & BORUN
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6402
(312) 474-6300

By: 

Paul B. Stephens
Registration No. 47,970

February 3, 2003

PENDING CLAIMS

1. A dock pad adapted to seal against a vehicle parked against the dock pad, comprising:

a foam core;

a cover disposed on the foam core; and

a heat shield adjacent the cover, wherein the dock pad is adapted to seal against the vehicle by virtue of the foam core being compressible, the cover being pliable, and the heat shield being pliable, wherein the heat shield has a higher thermal conductivity.

2. The dock pad of claim 1, wherein the heat shield is interposed between the cover and the foam core.

4. The dock pad of claim 1, wherein the heat shield has a higher thermal conductivity than the cover.

5. The dock pad of claim 1, wherein the heat shield can withstand a higher temperature than the foam core.

6. The dock pad of claim 1, wherein the heat shield can withstand a higher temperature than the cover.

7. A dock pad adapted to seal against a vehicle parked against the dock pad, comprising:

a foam core;

a cover disposed on the foam core; and

a heat shield adjacent the cover, wherein the dock pad is adapted to seal against the vehicle by virtue of the foam core being compressible, the cover being pliable, and the heat shield being pliable, wherein the heat shield has a higher reflectivity than the foam core.

8. The dock pad of claim 7, wherein the heat shield has a higher reflectivity than the cover.

9. The dock pad of claim 10, wherein the cover has a higher auto ignition point than the foam core.

10. A dock pad adapted to seal against a vehicle parked against the dock pad, comprising:

a foam core;

a cover disposed on the foam core; and

a heat shield adjacent the cover, wherein the dock pad is adapted to seal against the vehicle by virtue of the foam core being compressible, the cover being pliable, and the heat shield being pliable, wherein the cover has a lower auto ignition point than the heat shield.

11. The dock pad of claim 10, wherein the foam core has a lower auto ignition point than the heat shield.

12. The dock pad of claim 1, further comprising a backer attached to the cover and having greater rigidity than the foam core and the cover to provide the foam core and the cover with structural support.

13. The dock pad of claim 1, further comprising a sealing surface and a mounting surface that face away from each other with at least a portion of the heat shield extending substantially parallel to the sealing surface and being closer to the sealing surface than the mounting surface, wherein the sealing surface is adapted to seal against the vehicle and the mounting surface is adapted to be attached to a wall.

14. The dock pad of claim 1, wherein the dock pad has an elongated length running substantially horizontally.

15. The dock pad of claim 1, wherein the dock pad has an inverted U-shape with one horizontally elongated member and two vertically elongated members, with the heat shield being part of the horizontally elongated member.

16. The dock pad of claim 1, wherein the heat shield includes aluminum.

17. A dock pad, comprising:

a foam core;

a cover disposed on the foam core; and

a heat shield interposed between the cover and the foam core, wherein the heat shield has a higher thermal conductivity than the foam core and the cover.

19. A dock pad, comprising: a backer; a foam core; a cover; and a heat shield; wherein the foam core is between the backer and a sealing surface of the cover, the heat shield is between the

foam core and the sealing surface, the backer is more rigid than the foam core and the cover, and the heat shield has a higher thermal conductivity than the foam core.

20. A dock pad, comprising: a backer; a foam core; a cover; and a heat shield; wherein the foam core is between the backer and a sealing surface of the cover, the heat shield is between the foam core and the sealing surface, the backer is more rigid than the foam core and the cover, and the heat shield has a higher thermal conductivity than the foam core.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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01/03/2002

James A Flight
Marshall O'Toole Gerstein Murray & Borun
6300 Sears Tower
233 South Wacker Drive
Chicago, IL 60606-6402

RECEIVED

JAN 11 2002

MARSHALL GERSTEIN

EXAMINER

HORTON, YVONNE MICHELE

ART UNIT PAPER NUMBER

3635

DATE MAILED: 01/03/2002

Docketed:

4/3/02

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/548,876

Applicant(s)
JASON D. MILLER ET AL.

Examiner
YVONNE M. HORTON

Art Unit
3635



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 9, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6 20) ☐ Other: _____

Art Unit: 3635

DETAILED ACTION

Specification

The abstract of the disclosure stands objected to because line 7, which recites "F:\MATTHEWHARTER\DOCS\0-0A.APP", should be deleted. Correction is required.

See MPEP § 608.01(b).

The use of the trademark *VELCRO* remains noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

Claim 7 stands objected to because of the following informalities: Claim 7, line 2, change from "cover" to "core". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 3635

Claims 1, 2 and 12-15 stand rejected under 35 U.S.C. 102(e) as being anticipated by US patent 6016637, **Styba**.

In regards to claim 1, **Styba** discloses a dock pad (24) adapted to seal against a vehicle parked against the dock pad, comprising a foam core (30); a cover (40) disposed on the foam core; and a heat shield (34) adjacent the cover, wherein the dock pad is adapted to seal against the vehicle by virtue of the foam core being compressible, the cover being pliable, and the heat shield being pliable. Although the heat shield (34) of **Styba** is noted for use as a puncture resistor, **Styba** also discloses that this material (34) could be "polyester". Polyester is well known in the art for its flexible and flame resistance characteristics. So, even though **Styba** does not explicitly state that the material (34) is a "heat shield", heat resistance is an inherent characteristic of the disclosed material - polyester.

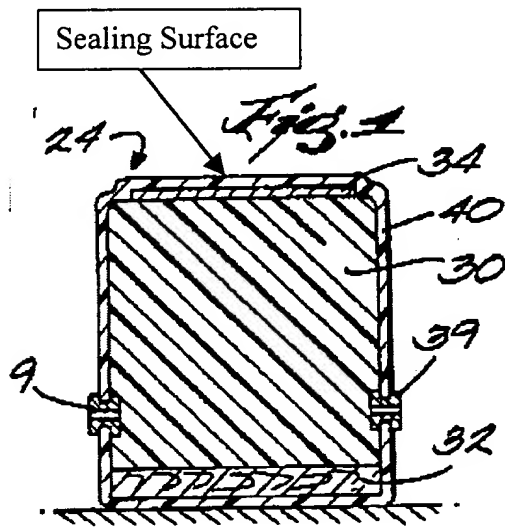
In regards to claim 2, **Styba** discloses the heat shield (34) being interposed between the cover (40) and the foam core (30), see Figure 4.

In regards to claim 12, **Styba** discloses a backer (32) attached to the cover (40). The backer (32) is wood and knowingly has a greater rigidity than the foam core (30). The backer (32) serves to provide the foam core (30) and the cover (40) with structural support.

In regards to claim 13, in Figure 4 below, **Styba** discloses a sealing surface and a mounting surface (MS) that face away from each other with at least a portion of the heat shield (34) extending substantially parallel to the sealing surface and being closer

Art Unit: 3635

to the sealing surface than the mounting surface (MS), wherein the sealing surface is adapted to seal against the vehicle and the mounting surface (MS) is adapted to be attached to a wall (16). (See Below).



Art Unit: 3635

In regards to claim 14, **Styba** discloses the dock pad (10) having an elongated length (20) running substantially horizontally.

In regards to claim 15, **Styba** discloses the dock pad (10) having an inverted "U-shape" with one horizontally elongated member (20) and two vertically elongated members (18, 18'), with the heat shield (34) being part of the horizontally elongated member (20).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 3-11 and 17-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Styba**. **Styba** discloses the claimed invention except for the heat shield (34) having a higher thermal conductivity than the foam core (30); the heat shield (34) having a higher thermal conductivity than the cover (40); the heat shield (34) being able to withstand a higher temperature than the foam core (30) and cover (40); the heat shield (34) having a higher reflectivity than the foam core (30) and cover (40); the cover (40) having a higher auto ignition point than the foam core (30); the cover (40) having a lower auto ignition point than the heat shield (34); and the foam core (30) having a lower auto ignition point than the heat shield (34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the heat shield with a higher thermal conductivity than the foam core; the heat shield with a higher thermal conductivity than the cover; the heat shield being able to withstand a

Art Unit: 3635

higher temperature than the foam core and cover; the heat shield with a higher reflectivity than the foam core and cover; the cover with a higher auto ignition point than the foam core; the cover with a lower auto ignition point than the heat shield; and the foam core with a lower auto ignition point than the heat shield; since it is within the skill of a worker in the art to select a known material on the basis of its suitability for the intended use as an obvious matter of design choice. The independent claim merely calls for a foam core and a heat Sheila. There are several different types of foam cores as there are heat shields. Each type of material bears its own distinct characteristics with respect to thermal conductivity and ignition points. The type of foam and heat shield would depend greatly upon the environment in which the dock pad is going to be used. If the dock pad was not used as frequently as others, a heat shield with not as high a thermal conductivity may be used because the dock pad would not be getting as much use (i.e the chance of the taillights of a truck destroying the pad are less) and vice-versa.

Claim 16 stands rejected under 35 U.S.C. 103(a) as being unpatentable over **Styba**. **Styba** discloses the claimed invention except for the heat shield including aluminum. It too would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the heat shield to include aluminum, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design

Art Unit: 3635

choice. Again the material selection for the heat shield depends upon the environment and the amount of use the dock pad would be subjected.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Styba** in view of **Commercial Material RTCM01**. **Styba** discloses the claimed invention except for the heat shield including aluminum. **RTCM01**, as disclosed by the applicant, consists of two sheet layers of perforated aluminum. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice, it too would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the heat shield of **Styba** with the aluminum of **RTCM01** in order to ensure that the dock pad is not only puncture resistant but also resistant to excessive heat conditions thereby increasing the life of the dock pad.

Claim 20 stands rejected under 35 U.S.C. 103(a) as being unpatentable over **Styba**. **Styba** discloses dock pad, comprising a backer (32); a foam core (30); a cover (40); and a heat shield (34); wherein the foam core (30) is between the backer (32) and a sealing surface (see figure 4 above) of the cover (40), the heat shield (34) being between the foam core (30) and the sealing surface, the backer (32) is more rigid than the foam core (30) and the cover (40). **Styba** does not disclose the heat shield being able withstand a higher temperature than the foam core and the cover. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the heat shield being able to withstand a higher temperature than the foam core

Art Unit: 3635

and cover; since it is within the skill of a worker in the art to select a known material on the basis of its suitability for the intended use as an obvious matter of design choice.

The independent claim merely calls for a foam core and a heat Sheila. There are several different types of foam cores as there are heat shields. Each type of material bears its own distinct characteristics with respect to thermal conductivity and ignition points. The type of foam and heat shield would depend greatly upon the environment in which the dock pad is going to be used. If the dock pad was not used as frequently as others, a heat shield with not as high a thermal conductivity may be used because the dock pad would not be getting as much use (i.e the chance of the taillights of a truck destroying the pad are less) and vice-versa.

Response to Arguments

Applicant's arguments filed 10/9/01 have been fully considered but they are not persuasive because although the heat shield (34) of **Styba** is noted for use as a puncture resistor, **Styba** also discloses that this material (34) could be "polyester". Polyester is well known in the art for its flexible and flame resistance characteristics. So, eventhough **Styba** does not explicitly state that the material (34) is a "heat shield", heat resistance is an inherent characteristic of the disclosed material - polyester. Hence, there is nothing precluding the puncture resistant material (34) of **Styba** from also being a heat shield, especially since heat resistance is an inherent characteristic

Art Unit: 3635


the disclosed material - see the attached definitions for "polyester fiber and resins" as provided by "The Hawley's Condensed Chemical Dictionary", 11th edition.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909.


Yvonne M. Horton
Patent Examiner
Art Unit 3635
December 29, 2001

Carl D. Friedman
Supervisory Patent Examiner
Group 3600

gins to degrade at 148°C, retains strength and elastomeric properties in contact with synthetic lubricants, solvents, hydraulic fluids, oils, etc. at temperatures in the range 148–204°C, has limited flexibility at temperatures below -17°C. Nonflammable.

Use: O-rings, seals, gaskets, diaphragms, hose, sheets and coatings for fabrics and other surfaces.

polydimethylsiloxane. (PDMS). A silicone polymer developed for use as a dielectric coolant and in solar energy installations. It also may have a number of other uses. It is stated to be highly resistant to oxidation and to biodegradation by microorganisms. It is degradable when exposed to a soil environment by chemical reaction with clays and water, by which it is decomposed to silicic acid, carbon dioxide, and water.

poly-p-dinitrosobenzene. See "Polyac."

"Polydril."²³³ TM for a synthetic water-soluble polymer.

Use: Flocculating agent in the oil industry.

polyelectrolyte. A high polymer substance, either natural (protein, gum arabic) or synthetic (polyethyleneimine, polyacrylic acid salts) containing ionic constituents; may be either cationic or anionic. The former type is widely used for industrial applications. Water solutions of both types are electrically conducting, some are effective in concentrations as low as 1 ppm. In a given polyelectrolyte, ions of one sign are attached to the polymer chain, while those of opposite sign are free to diffuse into the solution. Major uses are flocculation of solids (especially dissolved phosphates) in potable water, dispersion of clays in oil well drilling muds, soil conditioning, anti-static agents, and treatment of paper-mill waste water. Ion-exchange resins are cross-linked (stabilized) polyelectrolytes.

See also flocculant; "Purifloc"; "Cat-Floc."

polyene. Any unsaturated aliphatic or alicyclic compound containing more than four carbon atoms in the chain and having at least two double bonds. Examples are pentadiene, cyclooctatriene.

polyester fiber. Generic name for a manufactured fiber (either as staple or continuous filament) in which the fiber-forming substance is any long chain synthetic polymer composed of at least 85% by weight of an ester of a dihydric alcohol and terephthalic acid (Federal Trade Commission).

See "Dacron"; polyethylene terephthalate.

Properties: Strength (staple) 2.2–4.0 g per denier; (continuous filament) up to 9.5 g denier, mp 264°C, water absorption 0.5%. Nonflammable.

Use: Tire fabric, seat belts, reinforcement of rubber hose for sea water cooling systems, as blend in clothing fabrics, fire-hose jackets.

polyester film. Continuously extruded polyester sheet of various thicknesses, especially useful in electrical equipment because of its high resistivity. Its tensile strength of 25,000 psi is much greater than that of other plastic films. Sensitized polyester film is used in magnetic tapes, in the photocopying technique known as reprography.

polyester resin. Any of a group of synthetic resins, which are polycondensation products of di-carboxylic acids with dihydroxy alcohols. They are thus a special type of alkyd resin but, unlike other types, are not usually modified with fatty acids or drying oils. The outstanding characteristics of these resins is their ability, when catalyzed, to cure or harden at room temperature under little or no pressure. Most polyesters now produced contain ethylenic unsaturation, generally introduced by unsaturated acids. The unsaturated polyesters are usually crosslinked through their double bonds with a compatible monomer, also containing ethylenic unsaturation, and thus become thermosetting. Flame resistance is imparted by using either acid or glycol ingredients having a high content of halogens, e.g., HET acid.

The principal unsaturated acids used are maleic and fumaric. Saturated acids, usually phthalic and adipic, may also be included. The function of these acids is to reduce the amount of unsaturation in the final resin, making it tougher and more flexible. The acid anhydrides are often used if available and applicable. The dihydroxy alcohols most generally used are ethylene, propylene, diethylene, and dipropylene glycols. Styrene and diallyl phthalate are the most common crosslinking agents. Polyesters are resistant to corrosive, chemicals, solvents, etc.

Forms: Sheets, powder, chips.

Use: Reinforced plastics, automotive parts, boat hulls, foams, encapsulation of electrical equipment, protective coatings, ducts, flues and other structural applications, low-pressure laminates, magnetic tapes, piping, bottles, nonwoven disposable filters, low-temperature mortars.

See also alkyd resin, polyester fiber.

polyethenoid. Characterizing an aliphatic compound having more than one ethene group —CH=CH—. Linoleic acid is a polyethenoid fatty acid.

polyether. A polymer in which the repeating unit contains a C=O bond derived from aldehydes or epoxides or similar materials.

See also following entries.

polyether, chlorinated. A highly crystalline material that is 46% chlorine. Outstanding corrosion resistance. Good electrical resistance. Readily processed and fabricated.

Use: Fluid-bed coating, tank linings, piping, valves, laboratory equipment, chemical processing equipment.

polyether, cyclic. See crown ether.

polyether foam. A polyurethane foam, either rigid or flexible, made by use of a polyether as distinct from a polyester or other resin component.

Hazard: As for polyurethane.

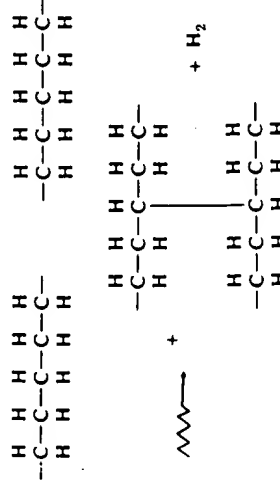
polyether glycol. A compound with a structural skeleton such as HO—C—C—O—C—C—O—C—C—O—C—C—OH. The length of the chain can vary widely and the number of consecutive carbon atoms may be greater than two. Examples are polyethylene glycol and polypropylene glycol.

polyethylene. CAS: 9002-88-4. (H₂C=CH₂)_n chlorosulfonated. See "Hypalon."

crosslinked (XLPE).

Properties: Thermosetting white solid, high-temperature-resistant, excellent resistance to chemicals and to creep, high impact and tensile strength, high electrical resistivity, insoluble in organic solvents, does not stress-crack. Combustible.

Derivation: (a) By irradiating linear polyethylene with electron beam or gamma radiation, crosslinking taking place through a primary valence bond, as shown.



(b) By chemical crosslinking agent such as an organic peroxide (e.g., benzoyl peroxide). All grades of polyethylene and most copolymers can be chemically crosslinked.

Use: Wire and cable coatings and insulation (low-density grades), pipe and molded fittings (high-density grades). Special types having low electrical resistivity can be made; these can be regarded as semiconductors.

Note: In molding crosslinked polyethylene, the desired part must be formed before crosslinking

is initiated, after crosslinking and wide range of a universal polymers.

The density

plastic polypropylene spacing of the materials have been comparatively chains. Polylinear. The plastic by increased low-density (br Properties: Cr 240F, tensile × 10³ inch/lb above 200F, Derivation: (1) radical-initiat

spheres (2 as catalyst (u more effective of only 100–3 is undisclosed

Use: Packaging paper coating ping contain cordage, refu base, squeeze

high-density (li Properties: Cr tensile streng lb/in notch, h permeable, h acid.

Derivation: Et lysts at 1–100 room temper alkyl, e.g., tri (TiCl₄) dissol vapor-phase r veloped in 19 tallic catalyst: vents such as

Use: Blow-mc items, film an oil containers Note: Ethylene ing percentag or acrylic acid copolymerizat When butadie a vulcanizabl low molecular Properties: Mol cent white sol

Form PTO-1449 (Modified)

OCT 09 2001

PATENT & TRADEMARK OFFICE

U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

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Serial No.

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INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant

MILLER et al.

Filing Date

04/13/00

Group

1713

OCT 12 2001

U.S. PATENT DOCUMENTS

*Examiner Initials		Document Number	Issue Date	Name	Class	Subclass	Filing Date If Appropriate
<i>[Signature]</i>	A01	3,500,599	03/17/70	S. Sciolino	52	173	10/23/67
<i>[Signature]</i>	A02	5,996,291	12/07/99	Styba et al.	52	173.2	02/23/98

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

<i>[Signature]</i>	C01	International Search Report corresponding to International Application Serial No. PCT/US01/40532, European Patent Office, dated 22.08.01, 6 pages.

519665

EXAMINER

DATE CONSIDERED

12/26/01

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,876	04/13/2000	Jason D. Miller	0-03A	7633

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07/29/2002

James A Flight
Marshall O'Toole Gerstein Murray & Borun
6300 Sears Tower
233 South Wacker Drive
Chicago, IL 60606-6402

RECEIVED

AUG 02 2002

MARSHALL GERSTEIN

EXAMINER

HORTON, YVONNE MICHELE

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 07/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory ActionApplication No.
09/548,876Applicant(s)
JASON MILLER ET AL.Examiner
YVONNE M. HORTONArt Unit
3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED Jul 8, 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

THE PERIOD FOR REPLY [check only a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

- ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see NOTE below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-20

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

10. ☐ Other: 